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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOCHEN L. LEIDNER and FRANK SCHILDER

Appeal 2020-000856 Application 13/423,127 Technology Center 3600

Before AMBER L. HAGY, MICHAEL J. ENGLE, and PHILLIP A. BENNETT, *Administrative Patent Judges*.

ENGLE, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–10, 12–30, 32–40, and 42–48, which are all of the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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¹ We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies Refinitiv US Organization LLC as the real party in interest. Appeal Br. 1.

TECHNOLOGY

The application relates to "providing data and analysis useful in recognizing investment related trends, threats and opportunities including risk identification using information mined from information sources." Spec. ¶ 2.

REJECTION ON APPEAL

Claims 1–10, 12–30, 32–40, and 42–48 stand rejected under 35 U.S.C. § 101 as directed to patent-ineligible subject matter without significantly more. Final Act. 4.

The rejection under 35 U.S.C. § 112 was withdrawn. Ans. 3.

ANALYSIS

Legal Background

"Eligibility under 35 U.S.C. § 101 is a question of law, based on

underlying facts." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018). The Supreme Court has set forth a two part test for § 101 to determine whether the subject matter of a claim is patentable: (1) "whether the claims at issue are directed to" "laws of nature, natural phenomena, and abstract ideas" and (2) "whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 79, 78 (2012)).

In 2019, the U.S. Patent & Trademark Office ("USPTO") expanded on the Supreme Court's test with revised guidance. USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Guidance"); USPTO, October 2019 Update: Subject Matter Eligibility,

available at https://www.uspto.gov/sites/default/files/documents/
peg_oct_2019_update.pdf ("Oct. Update"). Under that Guidance, we use the following steps to determine whether a claim recites the following items:

USPTO Step	Does the claim recite?	MPEP §
1	A process, machine, manufacture, or composition of matter	2106.03
2A, Prong 1	A judicial exception, such as a law of nature or any of the following groupings of abstract ideas: 1) Mathematical concepts, such as mathematical formulas; 2) Certain methods of organizing human activity, such as a fundamental economic practice; or 3) Mental processes, such as an observation or evaluation performed in the human mind.	2106.04
2A,	Any additional limitations that integrate the judicial	2106.05(a)-
Prong 2	exception into a practical application	(c), (e)-(h)
2B	Any additional limitations beyond the judicial exception that, alone or in combination, were not "well-understood, routine, conventional"	2106.05(d)

See Guidance, 84 Fed. Reg. at 52, 55, 56.

The Prior Decision

Though Appellant does not directly address it, the Board previously affirmed a § 101 rejection in this application.² *See* Decision on Appeal 4–15 (July 26, 2018) ("Prior Decision"). The Prior Decision mailed before the release of the 2019 Guidance. Nevertheless, the Prior Decision effectively addressed the analysis required by the Guidance, including the following:

² Appellant is reminded that 37 C.F.R. § 41.37(c)(1)(ii) requires an appeal brief include a "statement identifying . . . all other prior and pending appeals . . . which . . . may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal."

USPTO Step	Sample Holding from Prior Decision	Sample Pages
2A, Prong 1	"[A]ll the steps/functions recited in Appellants' claims are nothing more than 'processing text, analyzing the text to identify risk, generat[ing] a risk profile based on the analysis, compar[ing] risk profiles, identify[ing] trend data, and stor[ing] the result' that can also be performed mentally or using pen and paper."	8–11
2A, Prong 2	"Appellants' claims do not improve the performance of a computer or solve a problem specific to computers or computer networks."	11, 14
2B	"[A]fter <i>Alice</i> , there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible."	14

See also Ans. 4.

The Subsequent Amendments

After the Prior Decision, Appellant amended the claims to add further limitations. Claim 1 is representative and reproduced below with underlining to show the text added since the Prior Decision:

1. A computer implemented method comprising:

- a) processing by a computer <u>using a classifier</u>, at least one <u>tagger</u>, and a linker, a set of textual information to automatically identify a text string indicative of risk associated with an entity by identifying within the text string an entity tag and a pre-defined word, pattern, or phrase indicative of a defined risk type, the pre-defined word, pattern, or phrase comprising a representation of a set of sequences of tokens in the set of textual information, wherein the set of sequences of tokens comprises at least one sequence of tokens corresponding to a pattern of wild cards;
- b) automatically analyzing by <u>a linguistic analyzer module</u> <u>of</u> a computer a set of linguistic characteristics of the text string and applying a learned risk taxonomy to the text string to identify

a risk associated with the entity, transforming textual information related to the identified risk into a numerical expression;

- c) based upon the step of automatically analyzing, automatically generating by the computer <u>using an entity-specific risk profile generation module</u> an entity-specific risk profile ("ERP") associated with the entity, the entity-specific risk profile comprising a first risk component associated with a first risk type and a second risk component associated with a second risk type, each risk component comprising a numerical expression derived from an identified risk associated respectively, with either the first or second risk type, and storing the first and second risk components in a risk database managed by a risk database manager, the first and second risk components being associated with metadata from the set of textual information;
- d) automatically comparing a first entity-specific risk profile associated with a first entity with a second entity-specific risk profile associated with the first or an other entity, whereby the first and second risk components associated with the first and second entity-specific risk profiles are compared to derive a difference;
- e) automatically identifying trend data based on the derived difference and generating a forecast based at least in part on the trend data; and
- f) storing the first and second entity-specific risk profiles and the forecast in a memory accessible by the computer.

See Amendment (Feb. 5, 2019); Amendment (Sept. 26, 2018).

Whether the Amendments Render the Claims Eligible Under \S 101

The question before us is whether the amendments, in light of the 2019 Guidance, render the claims eligible under § 101. We agree with the Examiner that they do not.

The subsequent amendments by the Appellant have not altered the scope of the abstract idea, nor have they provided a practical application. They have merely provided names for modules and Application 13/423,127

textual data; and a step for storing risk components in a generic computer database.

Ans. 8.

For example, in the Prior Decision, claim 1 already recited "analyzing . . . linguistic characteristics," so the amendment adding that this step is done by a "linguistic analyzer module" merely gives a name that repeats the previously-recited functionality. It fails to provide any further technical details. The same is true for the new limitation of "using an entity-specific risk profile generation module" to perform the previously-recited step of "generating . . . an entity-specific risk profile." The addition of the "classifier," "tagger," and "linker" are similarly devoid of further technical details and are never referred to again in the claims.

The amendments also specified that the previously-recited "predefined word, pattern, or phrase" must now comprise "at least one sequence of tokens corresponding to a pattern of wild cards." But Appellant fails to explain how this is anything more technical or less of a mental process than the previously-recited "pattern," such as a person mentally searching for the pattern of any word starting with "risk" (e.g., "risking" and "risked"). Thus, the pattern, including any wildcards, is part of the abstract idea and "[i]t has been clear since *Alice* that a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept." *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018).

We likewise agree with the Examiner that storing the result in a database is an insignificant extra-solution activity that does not provide any technical improvement (thereby insufficient under the Guidance's Step 2A, Prong 2) and instead uses only generic components (thereby insufficient

under the Guidance's Step 2B). As the Federal Circuit has said, "generic computer components such as an 'interface,' 'network,' and 'database' do not satisfy the inventive concept requirement." *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324–25 (Fed. Cir. 2016). "This type of activity, i.e., organizing and accessing records through the creation of an index-searchable database, includes longstanding conduct that existed well before the advent of computers and the Internet." *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1327 (Fed. Cir. 2017). Appellant's Specification likewise recognizes the preexistence of databases in the Background of the Invention and elsewhere. *E.g.*, Spec. ¶¶ 7, 78.

Appellant argues in conclusory fashion that "the claimed invention, when properly viewed as a whole, is not analogous to any of the concepts identified in the 2019 Guidance in the three identified concept groupings" because "[c]omputers can only inherently perform basic mathematical and logical operations." Appeal Br. 12. Appellant interprets the "mental process" category too narrowly. As the Guidance instructs, "[i]f a claim, under its broadest reasonable interpretation, covers performance in the mind but for the recitation of generic computer components, then it is still in the mental processes category unless the claim cannot practically be performed in the mind." Guidance, 84 Fed. Reg. at 52 n.14 (emphasis added). Here, Appellant fails to provide sufficient explanation why the abstract idea cannot be performed in the human mind or with pen and paper, as held in the Prior Decision.

Appellant also argues that "[o]ne key technical solution provided by the method of claim 1 is the more efficient processing of large corpuses of textual information and the storage and management of the processed Information to provide for timely and useful human usable output." Reply Br. 2. However, any alleged "speed increase comes from the capabilities of a general-purpose computer, rather than the patented method itself." *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016); *see also BSG Tech*, 899 F.3d at 1288 ("These benefits, however, are not improvements to database functionality. Instead, they are benefits that flow from performing an abstract idea in conjunction with a well-known database structure.").

In sum, Appellant fails to persuade us that any of the amendments significantly change the abstract idea, integrate the abstract idea into a practical application, or are not well-understood, routine, and conventional. Thus, just as in the Prior Decision, the claims are directed to an abstract idea without significantly more.

Accordingly, we sustain the rejection of claim 1, and claims 2–10, 12–14, 16–30, 32–40, and 42–48, which Appellant argues are patentable for similar reasons. *See* Appeal Br. 15; 37 C.F.R. § 41.37(c)(1)(iv).

OUTCOME

The following table summarizes the outcome of each rejection:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1–10, 12–30,	101	Eligibility	1–10, 12–30,	
32–40, 42–48			32–40, 42–48	

TIME TO RESPOND

No time for taking subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.36(a)(1)(iv).

AFFIRMED